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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,000	08/20/2003	Shingo Tanino	031005	5728

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EXAMINER

BONZO, BRYCE P

ART UNIT	PAPER NUMBER
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2113

MAIL DATE	DELIVERY MODE
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02/05/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No.	Applicant(s)	
	10/644,000	TANINO ET AL.	
	Examiner	Art Unit	
	Bryce P. Bonzo	2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

NON-FINAL OFFICIAL ACTION

Status of the Claims

Claims 1, 2 and 9 are rejected under 35 USC §102.

Claims 3-8 and 10 are rejected under 35 USC §103.

Rejections under 35 USC §102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Woodall (United States Patent Application Publication US 2003/0081556 A1).

As per claim 1, Woodall discloses:

1. A network calculator system comprising:

a server connected to a network (¶9);

a storage connected to the network and to the server through a plurality of transmission paths (¶26, ¶9); and

a management device connected to the network for recording a correspondence between the transmission paths and devices included in the transmission paths (¶27, ¶9),

wherein if a device fails, which is included in the transmission path through which the server accesses data stored in the storage (¶13), the server or the storage notifies the management device of the faulty device (¶12), and said management device judges whether the notified faulty device is included in another transmission path, and if the notified faulty device is included in another transmission path (¶42, ¶14, ¶32), said management device determines the transmission path through which the server accesses data stored in the storage and also the another transmission path as being unavailable and causes the server to stop using the unavailable transmission paths when the server accesses the storage (¶42, ¶14, ¶32).

2. A network calculator system according to claim 1 further comprising a fiber channel switch connected to the network, the server and the storage for notifying of a faulty device included in the fiber channel switch (¶25, ¶31, ¶32), wherein the fiber channel switch is included in the transmission paths (¶25).

Claim 9 is the method of managing the devices of claim 1 and is rejected on the same grounds.

Rejections under 35 USC §103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woodall (United States Patent Application Publication US 2003/0081556 A1) in view of Dunning et al. (United States Patent No. 6,683,850 B1).

As per claim 3, Woodall discloses:

3. A network calculator system comprising:

a server connected to a network for managing its own device information and returning the device information in reply to a request (¶9);

a storage connected to the network and to the server by a plurality of transmission paths for managing its own device information and returning the device information in reply to a request (¶26, ¶9); and

a management device connected to the network for managing device information on the server and the storage (¶27, ¶9),

wherein said management device records a correspondence between transmission paths through which the server accesses data stored in the storage and devices included in the transmission paths, and judges from the returned device information whether there is any faulty device, and determines transmission paths which

include the faulty device as being unavailable, and causes the server, which accesses through the transmission paths when an application program is executed, to stop using the unavailable transmission paths (§42, §14, §32).

Woodall does not explicitly disclose, while Dunning discloses:

a server connected to a network for managing its own device information and returning the device information in reply to a request (Figure 4)

a management device connected to the network for managing device information on the server and the storage(column 9, lines 14-21),

and makes the request to the server and the storage for the device information on a regular basis (column 9, lines 14-21).

Woodall has described system for event and fault handling in a transmission network focusing the majority of his disclosure on the event handling aspects of network maintenance. Woodall for purposes of simplicity on discloses his with respect to a system which reports all status unsolicited. Dunning discloses the common practice of polling by a central authority, such as the manager of Woodall. The polling system provides the benefit of reduced overhead allows the manager to control the influx of status data. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to combine the network fault detecting, reporting and reconfiguring system of Woodall with the network repairing and link monitoring system of Dunning thus creating a more robust and transmission efficient network monitor.

As per claim 4, Woodall discloses:

the server and the storage for managing its own device information and returning the device information in reply to a request (§25),

while Dunning discloses:

wherein the management device makes the request to the fiber channel switch for the device information on a regular basis (column 9, lines 14-21).

As per claim 5, Woodall discloses:

A network calculator system comprising:

a server connected to a network (§9);

a storage connected to the network and to the server by a plurality of transmission paths (§9, §26); and

a management device connected to the network for recording a correspondence between transmission paths and devices included in the transmission paths (§29, §27),

determining the commonality between failed elements and the transmission paths associated with them (§42, §14, §32).

Woodall does not explicitly disclose:

wherein if a device is restored, which is included in the transmission path through which the server accesses data stored in the storage, the server or the storage notifies the management device of the restored device, and said management device judges

whether the restored device is included in another transmission path, and if the restored device is included in another transmission path, said management device determines the transmission path through which the server accesses data stored in the storage and also the another transmission path as being available, and causes the server, which accesses through the transmission paths when an application program is executed, to start using the transmission paths.

Dunning discloses the monitoring of failed elements for the purposes of reintegration into a network (column 9, lines 14-21). Reintegration of failed elements is a particularly advantageous feature as many failures are transient in nature. Thus full capacity can be restored many time by simply resetting or waiting out a error.

Thus it would have been obvious to one of ordinary skill in the art of computer networking to incorporate the reintegration of Dunning via the link determination of Woodall thus gaining a more robust network which potentially returns to full capacity after link restoration.

As per claim 6, Woodall discloses:

A network calculator system according to claim 5 further comprising a fiber channel switch connected to the network, the server and the storage for notifying of restoration of a faulty device included in the fiber channel switch, wherein the transmission paths include the fiber channel switch (¶25).

As per claim 7, Woodall discloses:

a server connected to a network for managing its own device information and returning the device information in reply to a request (¶9);

a storage connected to the network and to the server by a plurality of transmission paths for managing its own device information and returning the device information in reply to a request (¶26, ¶9); and

a management device connected to the network for managing device information on the server and the storage (¶27, ¶9),

wherein said management device records a correspondence between transmission paths through which the server accesses data stored in the storage and devices included in the transmission paths, and judges from the returned device information whether there is any faulty device, and determines transmission paths which include the faulty device as being unavailable, and causes the server, which accesses through the transmission paths when an application program is executed, to stop using the unavailable transmission paths (¶42, ¶14, ¶32).

Woodall does not explicitly disclose, while Dunning discloses:

a server connected to a network for managing its own device information and returning the device information in reply to a request (Figure 4)

a management device connected to the network for managing device information on the server and the storage(column 9, lines 14-21),

and makes the request to the server and the storage for the device information on a regular basis (column 9, lines 14-21).

Woodall has described system for event and fault handling in a transmission network focusing the majority of his disclosure on the event handling aspects of network maintenance. Woodall for purposes of simplicity on discloses his with respect to a system which reports all status unsolicited. Dunning discloses the common practice of polling by a central authority, such as the manager of Woodall. The polling system provides the benefit of reduced overhead allows the manager to control the influx of status data. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to combine the network fault detecting, reporting and reconfiguring system of Woodall with the network repairing and link monitoring system of Dunning thus creating a more robust and transmission efficient network monitor.

Woodall does not explicitly disclose:

wherein if a device is restored, which is included in the transmission path through which the server accesses data stored in the storage, the server or the storage notifies the management device of the restored device, and said management device judges whether the restored device is included in another transmission path, and if the restored device is included in another transmission path, said management device determines the transmission path through which the server accesses data stored in the storage and also the another transmission path as being available, and causes the server, which

accesses through the transmission paths when an application program is executed, to start using the transmission paths.

Dunning discloses the monitoring of failed elements for the purposes of reintegration into a network (column 9, lines 14-21). Reintegration of failed elements is a particularly advantageous feature as many failures are transient in nature. Thus full capacity can be restored many time by simply resetting or waiting out a error.

Thus it would have been obvious to one of ordinary skill in the art of computer networking to incorporate the reintegration of Dunning via the link determination of Woodall thus gaining a more robust network which potentially returns to full capacity after link restoration.

As per claim 8, Woodall discloses:

A network calculator system according to claim 7 further comprising a fiber channel switch connected to the network, the server and the storage for managing its own device information and returning the device information in reply to a request, wherein the management device makes the request to the fiber channel switch for the device information on a regular basis (§§25, §31, §32: fiber channel switching)


Claim 10 is the management method for implementing the network calculator of claim 5 and is rejected on the same grounds.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryce P. Bonzo whose telephone number is (571)272-3655. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Bryce P Bonzo
Primary Examiner
Art Unit 2113